30 minutes with various wavelengths at an intensity of 0.1 W/m^2 caused an elevation in yolk temperature by 0.3°F, resulting in an early hatch of broiler chicks and turkey poults. The use of intermittent lighting described herein eliminated the early hatch associated with the increase in egg temperature. In the second experiment, although illuminated intermittently, an early hatch was detected in the white light treated birds, suggesting overheating of eggs due to better penetration of the long wavelength used by the mini-incandescent lamps. Fairchild and Christensen (*Poultry Science*, 79, 1627-31 (2000)) had shown that photostimulation of turkey eggs with incandescent lamps caused early hatch with no effect on hatchability, embryonic survival, liver or heart growth, and glycogen content. In this study, increased early post hatch mortality was detected in the white light photostimulated group suggesting that the embryonic overheating effect has a carry over impact on survival of the poults.

In the Claims

Please amend claims 1, 9-11, 13, 26, and 40. The amended claims are provided below in clean form. Per 37 C.F.R. §1.121, amended claims are also shown in Appendix A with notations to indicate changes made (for convenience, all pending claims are provided in Appendix A).

1. (AMENDED) A method for exposing an embryo to light, the method comprising exposing an egg to a monochromatic light for a photoperiod comprising a light period and dark period.

9. (AMENDED) A method for exposing an embryo to light, the method comprising exposing an egg to a monochromatic light for a photoperiod comprising a light period and dark period, wherein the monochromatic light comprises a peak wavelength of at least about 550 nm to no greater than about 570 nm.

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10. (AMENDED) A method for exposing an embryo to light, the method comprising exposing an egg to a monochromatic light for a photoperiod comprising a light period and dark period, wherein each light period and each dark period are each independently at least about 3 minutes, wherein the monochromatic light comprises a peak wavelength of at least about 550 nm to no greater than about 570 nm.

11. (AMENDED) A method for exposing an embryo to light, the method comprising exposing an egg to a monochromatic light for a photoperiod comprising a light period and dark period, wherein each light period and each dark period are each independently at least about 3 minutes, wherein the monochromatic light comprises a peak wavelength of about 560 nm, half band +/- about 15 nm, and wherein the monochromatic light has an intensity of at least about 0.08 watts/m^2 to no greater than about 0.2 watts/m^2.

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13. (AMENDED) The method of claim 12 wherein the photoperiod comprises a light period and a dark photoperiod.

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26. (AMENDED) The method of claim 25 wherein the photoperiod comprises a light period and a dark photoperiod.

A6

40. (AMENDED) The method of claim 39 wherein the photoperiod comprises a light period and a dark photoperiod.